

January 14, 1953

Dr. G. Klein
Karolinska Institutet
Stockholm, Sweden

Dear Dr. Klein:

Thank you for the numerous reprints that arrived some time ago. I have been reading them with great interest. I shall be looking forward to a continued exchange.

The relationship between the tumor inoculum and development into solid vs. ascites form struck me as most curious. Perhaps this has already been satisfactorily explained as a matter of timing, etc. I wondered, however, whether development into ascites might not be encouraged by the presence of considerable exudate to start with, as suggested by your observations on the initiation of the Krebs ascites tumor. Then, the function of a large inoculum would be to excite an initial inflammatory response in the peritoneum, in turn providing sufficient exudate for ascites tumor growth. This should be easy enough to test, perhaps has been already. I do not doubt that in addition there is an adaptation, presumably through natural selection, of the tumor cells themselves, but I am referring to the behavior of established lines.

May I ask also whether there has been a serious attempt to cultivate the "ascites" in vitro? I appreciate the difficulties that would accompany any program that needed mouse serum, on the one hand, or the development of transplantable tumors in larger animals, on the other. Is it naive or obvious to suppose that the free cell form would be ideal for this purpose?

Yours sincerely,

Joshua Lederberg